MONOPHENOL MONOOXYGENASE
COUMARIC ACIDS

SKRIPSI

SEPTIANA

PENGARUH ASAM 4-HIDROKSISINAMAT DAN ASAM 4-METOKSISINAMAT TERHADAP AKTIVITAS TIROSINASE

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Lembar Pengesahan

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SKRIPSI

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ABSTRACT

Tyrosinase is known to be a key enzyme for melanin biosynthesis. Therefore, inhibition in tyrosinase activity will cause a decreasing in melanin production.

The inhibition of cinnamic acid and its derivatives against tyrosinase has been studied as the effort to find a new effective skin-lightening agent. 4-hidroxycinnamic acid and 4-metoxicinamic acid as two of cinnamic acid derivatives was tested to know its effect on inhibiting tyrosinase.

To Asses the efficacy of tyrosinase inhibition, tyrosinase activity using L-Tyrosine as a substrate was assayed spectrofotometrically with the dopachrome method.

Michaelis-Menten constant (Km) and maximum velocity (Vmax) of the enzyme activity were showed by Lineweavar-Burk's plots.

Key words: tyrosinase, 4-hidroxycinnamic acid, 4-metoxicinamic acid, inhibitory activity